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PATENT SPECIFICATION



Application Date: June 25, 1937. No. 17681/37.

" " June 23, 1938. No. 18612/38.

495,982

One Complete Specification Left: June 23, 1938.

(Under Section 16 of the Patents and Designs Acts, 1907 to 1932.)

Specification Accepted: Nov. 23, 1938.

PROVISIONAL SPECIFICATION

No. 17681 A.D. 1937.

Improvements in or relating to Brushes or Pads

I, WALTER WESSEL, Junior, citizen of Germany, of Industriestrasse 25, Remscheid, Germany, do hereby declare the nature of this invention to be as follows:—

Articles of clothing and in particular footwear such as shoes are now frequently formed from suede leather which is periodically cleaned by a wire or rubber brush applied with a circular motion to remove dust and raise the nap, a dressing, usually referred to as a cream then being applied after which said wire or rubber brush is again used to raise the nap and give the renovated finished surface.

The main object of the present invention is to provide a combined wire and rubber brush by means of which such articles of clothing formed from suede leather can be more readily and efficiently cleansed and/or renovated.

According to the present invention a rubber brush is formed with circular bristles on one side and with a flanged recess on the other side, said brush being provided at one end with a handle extending therefrom, the handle preferably comprising a shaped strip of wood, the substance sold under the registered Trade Mark xylonite or the like inserted into a recess formed in the end of the brush body and extending to near the end remote from the opening. In the flanged recess on the other side of the body bunches of wire bristles are secured which preferably extend through the floor thereof and into the wooden or like handle, and which project slightly beyond the upright all around flange.

The edge of the brush, for the whole or part of its perimeter is provided with a comparatively narrow flange adapted to enter crevices such as the groove formed between the welt and the uppers of the shoes, the edges of such flange being serrated or otherwise roughened to provide the desired cleansing and nap raising surface or said edge may be formed with a comparatively broad flange having a like

serrated or roughened edge or part of the perimeter may be formed with a narrow flange and the remaining part with a broad flange.

In carrying the invention into effect according to one convenient manner a brush for cleaning and renovating suede fabric, and in particular suede shoes is formed with a wooden handle about $5\frac{1}{2}$ inches long and about $\frac{1}{2}$ of an inch thick one end of which is shaped to form a convenient hand hold while the other end is parallel sided to enter a recess about $\frac{3}{4}$ of an inch wide and about 2 inches deep formed in the body part of a rubber brush which is moulded with integral rubber bristles on one side, and with an upright all round flange on the other side forming a recess $1\frac{1}{2}$ inches long by $\frac{1}{2}$ an inch wide. One side and the extreme end of the body part is formed with a narrow flange projecting for about $\frac{1}{4}$ of an inch, which is about $\frac{3}{32}$ nds of an inch thick, and formed with corrugations on the outside edge whilst the other side is formed with a flange of about $\frac{5}{16}$ ths of an inch in width and projecting about $\frac{1}{8}$ of an inch with the outer edge serrated in like manner to the thin flange.

Bunches of wire bristles arranged in rows are located in the flanged recess said wire bristles being formed of bundles of short lengths of wire doubled on itself around a staple of thicker wire which is driven through the floor of the recess and into the wooden handle, holes being bored or otherwise formed to receive the same if necessary. Usually three rows of bristles are provided which project about $\frac{3}{32}$ nds of an inch above the flange. The ends of the bristles are level with or project slightly above the all around flange which in practice prevents the bristles becoming crushed or matted so that they are effective in use over a longer period. It is to be understood that the dimensions may be varied within wide limits.

By these means a single implement is provided for cleaning and/or renovating suede leather or articles formed therefrom

in a cheap and convenient form and which provides for the most efficient treatment of such leather.

Dated this 24th day of June, 1937.

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9, Albert Square, Manchester, 2.

PROVISIONAL SPECIFICATION

No. 18612 A.D. 1938.

Improvements in or relating to Brushes or Pads

I, WALTER WESSEL, Junior, citizen of Germany, of Industriestrasse 25, Remscheid, Germany, do hereby declare the nature of this invention to be as follows:—

For cleaning and roughening leather it has been proposed to use a brush having a rubber body with rubber bristles, the bristles on one side having a cleaning effect, and on the other side a carding or roughening effect. This carding or roughening effect of rubber bristles depends on the sharp edges of the rubber bristles which soon wear off so that after a short period they do not have the desired renovating or carding effect.

The subject matter of my co-pending cognate application for Patent No. 17681 of 1937 is a combined wire and rubber brush for cleaning and renovating suede leather and the like, and the present invention is directed to constructional details in the combined wire and rubber bristle brush.

According to the present invention a brush is constructed with one or more sides or edges, having wire bristles so that the roughening or renovating can be done much quicker and more thoroughly, and over a longer period due to the wire bristles not wearing in use, or their efficiency becoming impaired.

The wire bristles are preferably fixed by pressing them into the handle so that the body is securely fixed in position and serves to support the bristles elastically for part of their length so as to obviate crushing or flattening without impairing their efficiency.

The general characteristics of brushes constructed according to the invention are described in my Cognate Application for Patent No. 17681 of 1937 which may be carried into effect in various ways, for example, a soft rubber brush body may

be formed with a recess to receive a handle of wood or other suitable material, the brush body being formed with rubber bristles on one side, and having holes formed in the other side, through which are inserted bunches of wire bristles which enter the handle. The bristles pass through the wall of the body and project above the exterior surface so that said body is firmly secured to the handle without necessity for other fixing means whilst the bristles are elastically supported.

Alternatively the rubber brush body may be formed or made as a single rubber plate formed with rubber bristles and adapted to be secured to the handle by glue or other adhesive, or a separate rubber plate being provided for the other side of the handle if desired, adapted to be attached by means of its bunches of wire bristles as before described, the rubber plate so attached being formed with or without a flange to surround the wire bristles, either all the bunches of bristles as a whole or round the individual bunches of bristles.

The edge of the brush, for the whole or part of its perimeter is provided with a comparatively narrow flange adapted to enter crevices such as the groove formed between the welts and the uppers of the shoes, the edges of such flange being serrated or otherwise roughened to provide the desired cleansing and nap raising surface or said edge may be formed with a comparatively broad flange having a like serrated or roughened edge or part of the perimeter may be formed with a narrow flange and the remaining part with a broad flange.

Dated this 22nd day of June, 1938.

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COMPLETE SPECIFICATION

Improvements in or relating to Brushes or Pads

I, WALTER WESSEL, Junior, citizen of Germany, of Industriestrasse 25, Remscheid, Germany, do hereby declare the nature of this invention and in what

manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—
Articles of clothing and in particular

footwear such as shoes are now frequently formed from suede leather which is periodically cleaned by a wire or rubber brush applied with a circular motion to remove dust and raise the nap, a dressing, usually referred to as a cream then being applied after which said wire or rubber brush is again used to raise the nap and give the renovated finished surface.

It has been proposed to use a brush comprising a rubber body with rubber bristles for this purpose but the roughening or nap raising effect of rubber bristles depends on the very sharp edges of such rubber bristles, which soon wear off in use so that after a short period of use they cease to have the desired roughening or nap-raising effect.

The main object of the present invention is to provide a combined wire and rubber brush by means of which such articles of clothing formed from suede leather can be more readily and efficiently cleansed and/or renovated, and which will remain effective over a comparatively long period.

According to the present invention a brush is formed comprising a body part and bristles formed from rubber, one or more of the long sides of the brush being provided with wire bristles. The body may be provided with a wooden or like handle and the wire bristles are preferably fixed by passing them through the rubber brush body into the handle, which serves to support the bristles elastically for part of their length so as to reduce the liability of said wire bristles to crumple in use without impairing their efficiency.

Conveniently a rubber brush is formed with circular rubber bristles on one side and with a flanged recess on the other side, said brush being provided at one end with a handle extending therefrom, the handle preferably comprising a shaped strip of wood, the substance sold under the registered Trade Mark "Xylonite" or the like inserted into a recess formed in the end of the brush body and extending to near the end remote from the opening. In the flanged recess on the other side of the body bunches of wire bristles are secured which preferably extend through the floor thereof and into the wooden or like handle, and which project slightly beyond the upright all around flange.

The edge of the brush, for the whole or part of its perimeter is provided with a comparatively narrow flange adapted to enter crevices such as the groove formed between the welt and the uppers of the shoes, the edges of such flange being serrated or otherwise roughened to provide the desired cleansing and nap raising sur-

face or said edge may be formed with a comparatively broad flange having a like serrated or roughened edge or part of the perimeter may be formed with a narrow flange and the remaining part with a broad flange.

The invention will be more particularly described by the aid of the accompanying drawings, in which the same reference letters or characters refer to the same thing or part throughout the several views, and in which:—

Figure 1 is a plan view of a combined wire and rubber brush constructed according to the invention, of which

Figure 2 is an edge view, and

Figure 3 is a transverse sectional view on the line 3, 3, Figure 1.

Figure 4 is a plan view of a slightly modified form of brush of which

Figure 5 is a transverse sectional view on the line 5, 5.

Figure 6 is a plan view of another modified form of brush constructed according to the invention of which

Figure 7 is a longitudinal sectional view, and

Figure 8 is a longitudinal sectional view of a still further modified form of the improved brush.

In carrying the invention into effect according to one convenient manner as illustrated in Figures 1 to 3, a brush for cleaning and renovating suede fabric, and in particular suede shoes, is formed with a wooden handle *a* about $5\frac{1}{2}$ inches long and about $\frac{1}{2}$ of an inch thick, one end of which is shaped to form a convenient hand hold, while the other end is parallel sided to enter a recess *b*¹ about $\frac{3}{4}$ of an inch wide and about 2 inches deep formed in the body part *b* of a rubber brush which is moulded with integral rubber bristles *c* on one side, and with an upright all around flange *d* on the other side forming a recess $1\frac{1}{2}$ inches long by $\frac{1}{2}$ an inch wide. One side and the extreme end of the body part is formed with a narrow flange *e* projecting for about $\frac{1}{4}$ of an inch, which is about $\frac{3}{32}$ nds of an inch thick, and formed with corrugations on the outside edge whilst the other side is formed with a flange *f* about $\frac{5}{16}$ ths of an inch thick and projecting about $\frac{1}{4}$ of an inch with the outer edge serrated in like manner to the thin flange.

Bunches of wire bristles *g* arranged in rows are located in the flanged recess *h*, said wire bristles being formed of bundles of short lengths of wire doubled on itself around a staple of thicker wire which is driven through the rubber floor of the recess *h* and into the wooden handle *a*, holes being bored or otherwise formed to receive the same if necessary. Usually

three rows of bristles *g* are provided which project about 3/32nds of an inch above the flange *d*. The ends of the bristles only project slightly above the all around flange *d* so that in practice the flange forms an elastic support for the bristles laterally and prevents the same becoming crushed or matted so that they are effective in use over a longer period.

10 In the example described above all the bunches of bristles are contained within the single recess *h* formed by the flange *d* but Figures 4 and 5 show a construction in which additional longitudinal flanges 15 *d*¹ and transverse flanges *d*² are provided within the all around flange *d*, to form separate recesses or pockets *h*¹ for each bunch of bristles *g* so that the latter are each elastically supported all around the 20 same, and instead of forming the rubber brush body with a recess *b*¹ to receive the handle the said body part is formed as two flat rubber plates *b*², *b*³ which may, if desired be joined together at the outer extremities or may be separate plates and 25 which are secured to the handle either by glue or like adhesive material or may be tacked in position.

Figures 6 and 7 illustrate a construction of the improved brush comprising a soft rubber brush body formed with a recess to receive the handle *a* and with rubber bristles *c* but in this case the flange *d* is dispensed with, the bunches of bristles 30 passing through the brush body and being embedded in the handle as in the previous examples, but the top *b*² of the soft rubber brush body is sufficiently thick to provide an all around elastic support for the 40 bunches of wire bristles *g*.

It is to be understood that such elastic support for the bunches of wire bristles is not an essential feature of the invention, Figure 8 showing a construction of brush 45 formed in accordance therewith in which the brush body *b* having integral rubber

bristles *c* is secured to one side of the handle *a* by glue or other suitable means, whilst the bunches of wire bristles *g* are secured directly to the other side of the 50 handle.

The dimensions of brushes made according to the invention may be varied within wide limits.

By these means a single implement is 55 provided for cleaning and/or renovating suede leather or articles formed therefrom of comparatively small size in a cheap and convenient form, and which provides for the most efficient treatment of such 60 leather.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim 65 is:—

1. A brush for cleaning and roughening or carding suede leather or the like constructed with a body part and bristles formed from rubber characterized in that 70 one or more of the long sides of the brush are provided with wire bristles.

2. A brush according to claim 1 characterized in that the wire bristles pass through holes to the rubber body and are 75 fixed to a handle, the arrangement being such that said body part is positively secured to the handle by the wire bristles.

3. Brushes according to claims 1 or 2 characterized in that bunches of wire 80 bristles, either singly or in groups are surrounded by rubber edging, integral with the brush body.

4. Brushes for cleaning and roughening or carding suede leather and the like, 85 constructed and arranged substantially as described with reference to the accompanying drawings.

Dated this 22nd day of June, 1938.

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[This Drawing is a reproduction of the Original on a reduced scale.]

